



Prevalance and Associated Risk Factors of Sexual Transmitted Infections among Sexually Active Youths Aged 15 - 45 Years Attending the EHFA Foundation Teaching Medical Centre, Foumbot

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Abstract

Sexually transmitted infections (STI) are among the most common acute conditions in the world. There are over 30 infections that can be transmitted sexually. Sexually transmitted infections (STI) remain a pressing public health challenge globally, with young people aged 15 - 24 disproportionately affected. In Cameroon, the prevalence of STI among sexually active youths aged 15 - 45 years is alarmingly high, contributing to increased morbidity, reduced academic performance, and long-term reproductive health complications. The objective of this study was to assess the prevalence and associated risk factors of sexually transmitted infections among sexually active youths aged 15 - 45 years attending the EHFA Foundation Teaching Medical centre, Foumbot. A community based cross sectional study was used in collecting data from consented patients, who were sampled through convenience sampling. Data collection was done using a well-structured questionnaire and ethical consideration was well observed. Statistical analysis was done using SPSS version 21 and statistical significance was considered if p value was less than or equal to 0.05. The study involved 117 participants, mostly females (57.3%) with a mean age of 27.6 ± 6.2 years; the majority were married (57.3%) and had attained secondary education (70.9%). The prevalence of STI was 41%, with syphilis being the most common (17.1%), followed by chlamydia (12%). There was a significant asso-

ciation between STI status and sex ($p = 0.03$) and marital status ($p = 0.01$), with females and married individuals being more affected. Most participants had very good knowledge of STI (98.3%), and the most recognized transmission route was unprotected sex, with significant differences by sex ($p = 0.05$) and occupation ($p = 0.05$). Although only 7.7% always used condoms, having multiple sexual partners was not significantly associated with STI prevalence ($p = 0.15$). A prior history of STI diagnosis showed a strong association with current STI positivity ($p = 0.02$), suggesting a risk of recurrence among previously infected individuals. It can therefore be recommended that targeted interventions focus on consistent condom use and routine STI screening, especially for individuals with prior infections.

Subject Areas

HIV, Infectious Diseases

Keywords

Prevalence, Associated Risk Factors, Sexually Transmitted Infections, Sexually Active Youths Aged 15 - 45 Years, EHFA Foundation Teaching Medical Centre, Foubot

1. Introduction

Sexually transmitted infections (STI) remain among the most prevalent acute conditions worldwide, with over 30 pathogens identified as transmissible through sexual contact [1]. Of these, four curable infections, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Treponema pallidum*, and *Trichomonas vaginalis*, account for the highest burden [2]. The World Health Organization (WHO) estimates that more than one million STI are acquired daily, with nearly 376 million new curable infections occurring annually [3]. Despite this alarming incidence, STI other than HIV remain a neglected public health priority, with global control and prevention efforts consistently falling short [4].

Adolescents and young adults bear a disproportionate share of this burden, representing about 25% of the sexually active population but accounting for nearly half of all new infections [5]. In sub-Saharan Africa, where youth populations are rapidly increasing, the risks are particularly pronounced [6]. Early sexual debut, peer influence, multiple partnerships, and substance use contribute to heightened vulnerability [7]. Additionally, limited access to youth friendly health services, coupled with social stigma and cultural barriers surrounding sexual health discussions, further compounds the challenge [8].

If untreated, STI lead to severe health consequences including infertility, pelvic inflammatory disease, ectopic pregnancies, chronic pelvic pain, cervical cancer, and increased susceptibility to HIV [9]. For women, infections during pregnancy pose risks of miscarriage, stillbirth, and congenital syphilis, while neonatal com-

plications such as low birth weight and blindness may also occur [10]. These consequences make early detection, treatment, and prevention of STI an urgent public health necessity, especially among adolescents whose reproductive health has long term generational implications [11].

In Cameroon, the prevalence of STI among youths aged 15 - 45 years remains significant. The 2018 Cameroon Demographic and Health Survey reported that 6.2% of females and 3.2% of males aged 15 to 24 exhibited symptoms suggestive of STI, though underreporting is likely due to stigma and limited testing [12]. Contributing factors include inadequate sexual and reproductive health (SRH) education, misconceptions about transmission, and low condom use among adolescents [13]. Despite government initiatives such as the integration of SRH education into school curricula and campaigns promoting condom use, the reach and effectiveness of interventions remain uneven, especially in rural areas [14].

Addressing the STI burden among Cameroonian youths aged 15 - 45 years requires culturally sensitive, evidence based, and youth-centered strategies. Comprehensive sexuality education should be standardized across all schools and introduced at earlier stages [15]. Health services must be made more accessible, confidential, and youth friendly, with expanded outreach to underserved rural populations [16]. Leveraging digital platforms and youth influencers can help counter misinformation and reduce stigma associated with STI [17]. Without such coordinated and inclusive efforts, the STI epidemic among young people in Cameroon is likely to escalate, threatening both individual well-being and national socio-economic development [18]. This research therefore aims at addressing the prevalence and associated risk factors of sexually transmitted infections among sexually active youths aged 15 - 45 years attending the EHFAF teaching medical centre, Foumbot.

2. Methodology

This study was carried out at the Essential Health for All Foundation (EHFAF) Teaching Medical Centre in Foumbot Sub-Division, West Region of Cameroon, a facility that serves both as a community health centre and a clinical training site, offering services in outpatient care, internal medicine, paediatrics, maternity, and imaging. A hospital-based cross-sectional study design was employed between May and June 2025 to determine the prevalence and associated risk factors of sexually transmitted infections (STIs) among sexually active youths aged 15 - 45 years attending the centre. Inclusion criteria included individuals within this age range who consented to participate, while those who refused consent were excluded. The dependent variable was STI prevalence, and the independent variables included socio-demographic characteristics and behavioural risk factors. Using Lorentz's formula with a prevalence estimate of 60%, a 95% confidence interval, and a 5% margin of error, the minimum sample size was calculated as 117, and participants were selected using convenience sampling to include all eligible youths attending

the centre during the study period. Data was collected using a pre-tested structured questionnaire comprising three sections: socio-demographics, STI prevalence, and risk factors. The questionnaire was developed, then pre-tested among 10 participants in a similar population outside the study site to ensure clarity, comprehension, and appropriateness of language. Minor modifications were made based on feedback, and reliability was checked using Cronbach's alpha for multi-item scales, yielding acceptable internal consistency. The questionnaire was administered directly by the investigator to ensure accuracy and completeness, with follow-up laboratory confirmation for suspected STI cases. Data was analyzed using SPSS version 21. Associations between independent variables and STI prevalence were assessed using bivariate chi-square (χ^2) tests, as the primary objective was to identify preliminary associations rather than control for confounders. Results were presented in tables, graphs, and charts, with statistical significance set at $p \leq 0.05$. Ethical approval was obtained from the relevant institutional authorities, and written informed consent was obtained from all participants. Confidentiality and privacy were strictly maintained throughout the study.

3. Results

3.1. Socio-Demographic Characteristics of Research Participants

The study included 117 participants. The mean $\pm$ standard deviation distribution of age range in the study population was observed to be 27.6 ± 6.2 years. With respect to gender, the highest proportion was made up of females ($n = 67$; 57.3%) compared to males ($n = 50$; 42.7%). Most participants were married ($n = 67$; 57.3%), while 36.8% ($n = 43$) were single, and a small number were either divorced ($n = 4$; 3.4%) or widowed ($n = 3$; 2.6%). Majority had attained secondary education ($n = 83$; 70.9%), followed by primary ($n = 16$; 13.7%) and tertiary education ($n = 14$; 12.0%), with only a few having no formal education ($n = 4$; 3.4%). Farming was the most common occupation ($n = 46$; 39.3%), followed by students ($n = 29$; 24.8%), housewives ($n = 19$; 16.2%), and teachers ($n = 13$; 11.1%), while others such as nurses ($n = 2$; 1.7%), journalists ($n = 3$; 2.6%), tailors ($n = 4$; 3.4%), and a veterinary worker ($n = 1$; 0.9%) made up the rest. In terms of religion, Christians formed the majority ($n = 77$; 65.8%), followed by Muslims ($n = 39$; 33.3%) and others ($n = 1$; 0.9%). Slightly more participants resided in urban areas ($n = 64$; 54.7%) compared to those in rural settings ($n = 53$; 45.3%), indicating a fairly balanced urban-rural distribution. This is presented in **Table 1**.

3.2. Prevalence of Sexually Transmitted Infection among Sexually Active Youths Aged 15 - 45 Years in the Study Population

From a total of 117 respondents, 113 were suspected of having sexually transmitted infections. From these 113 sent to the lab to confirm, 48 were confirmed to have an STI, yielding a prevalence of 41% in the study population as presented in **Figure 1**.

Table 1. Distribution of respondents according to their socio-demographics.

Variable	Characteristic	Frequency (n)	Percentage (%)
Sex	Male	50	42.7
	Female	67	57.3
	Total	117	100
Marital status	Single	43	36.8
	Married	67	57.3
	Divorced	4	3.4
	Widowed	3	2.6
	Total	117	100
Level of education	Primary	16	13.7
	Secondary	83	70.9
	Tertiary	14	12.0
	None	4	3.4
	Total	117	100
Occupation	Students	29	24.8
	Farming	46	39.3
	Teaching	13	11.1
	Nurse	2	1.7
	Journalist	3	2.6
	Veterinary	1	0.9
	Housewife	19	16.2
	Tailor	4	3.4
	Total	117	100
Marital Status	Christian	77	65.8
	Muslim	39	33.3
	Others	1	0.9
	Total	117	100
Place of residence	Urban	64	54.7
	Rural	53	45.3
	Total	117	100

3.3. Types of STI Identified

Figure 2 presents the prevalence of the sexually transmitted infections (STI) in the study population. The highest infection rate observed was for syphilis, with 17.1% testing positive. This was followed by chlamydia (12%), also showing a relatively high prevalence. Gonorrhea and hepatitis B each had a prevalence of 4.3%,

while hepatitis C was found in 3.4% of participants. The lowest prevalence was seen in HIV, with only 1.7% testing positive.

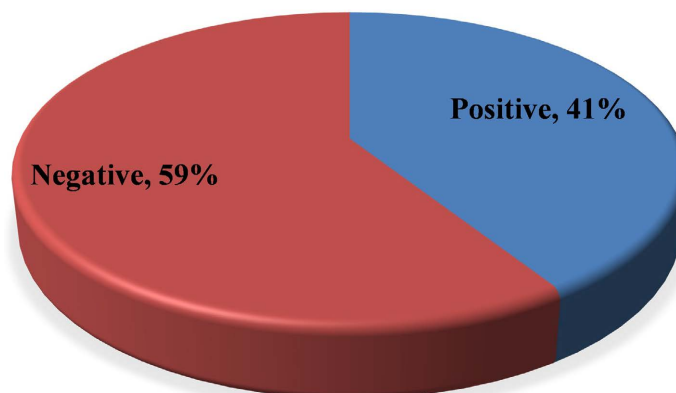


Figure 1. Pie chart showing the prevalence of STI in the study population.

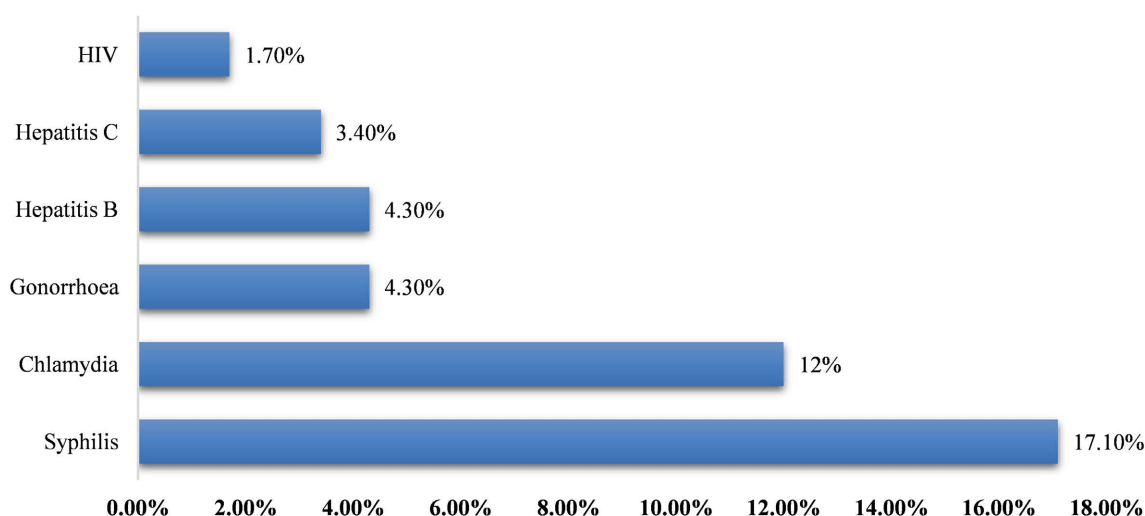


Figure 2. Bar chart showing the prevalence of each type of STI in the study population.

3.4. Association between Prevalence of STI and Socio Demographic Characteristics of Respondents

The analysis shows a significant association between sex and STI status ($\chi^2 = 15.26$, $p = 0.03$), with more females (24.8%) testing positive than males (16.2%), suggesting higher exposure or vulnerability among women. Marital status also showed a significant association with STI prevalence ($\chi^2 = 17.54$, $p = 0.01$); married individuals had the highest positivity rate (29.1%), followed by singles (11.1%), while no divorced individuals tested positive. Although the level of education, occupation, religion, and place of residence did not show statistically significant associations ($p > 0.05$), secondary education had the highest proportion of both STI-positive (25.6%) and STI-negative (45.3%) participants. Among occupations, farmers (17.1%) and housewives (9.4%) had the highest STI-positive rates, though this was not statistically significant ($p = 0.21$) (See **Table 2**).

Table 2. Association between prevalence of STI and socio demographic characteristics of respondents.

Variable	Characteristic	STI		Chi square (<i>p. value</i>)
		Positive n (%)	Negative n (%)	
Sex	Male	19 (16.2)	31 (26.5)	15.26
	Female	29 (24.8)	38 (32.5)	(0.03)*
Marital status	Single	13 (11.1)	30 (25.6)	
	Married	34 (29.1)	33 (28.2)	17.54
	Divorced	00 (0.00)	04 (3.40)	(0.01)*
	Widowed	01 (0.90)	02 (1.70)	
Level of education	Primary	09 (7.70)	07 (6.00)	
	Secondary	30 (25.6)	53 (45.3)	04.29
	Tertiary	06 (5.10)	08 (6.80)	(0.23)
	None	03 (2.60)	01 (0.90)	
Occupation	Students	08 (6.80)	21 (17.9)	
	Farming	20 (17.1)	26 (22.2)	
	Teaching	07 (6.00)	06 (5.10)	
	Nurse	00 (0.00)	02 (1.70)	9.70
	Journalist	00 (0.00)	03 (2.60)	(0.21)
	Veterinary	00 (0.00)	01 (0.90)	
	Housewife	11 (9.40)	08 (6.80)	
	Tailor	02 (1.70)	02 (1.70)	
Marital status	Christian	30 (25.6)	47 (40.2)	1.68
	Muslim	17 (14.5)	22 (18.8)	(0.43)
	Others	01 (0.90)	00 (0.00)	
Place of residence	Urban	28 (23.9)	36 (30.8)	0.43
	Rural	20 (17.1)	33 (28.2)	(0.32)

*-Statistically significant at 0.05 significance level.

3.5. Associated Risk Factors of Sexually Transmitted Infections among Sexually Active Youths Aged 15 - 45 Years in the Study Population

Knowledge on STI as a Risk Factor

Figure 3 presents the general knowledge of respondents on STI. Majority of the respondents in the study had very good knowledge on STI with a percentage score of 98.3%.



Figure 3. Pie chart showing general knowledge of respondents on STI.

From the 115 respondents that had very good knowledge on STI, majority of them (53.8%) listed HIV as the STI they know. These were followed by those that listed syphilis as the STI they know with a percentage score of 22.2%. Only 2 persons knew that hepatitis C is also one (1.7%) as shown in **Table 3** below.

Table 3. STI reported by the study respondents.

	Frequency	Percent	Valid percent	Cumulative percent
Chlamydia	8	6.8	7.0	7.0
Syphilis	26	22.2	22.6	29.6
HIV	63	53.8	54.8	84.3
Gonorrhoea	12	10.3	10.4	94.8
Hepatitis B	4	3.4	3.5	98.3
Hepatitis C	2	1.7	1.7	100.0
Total	115	98.3	100.0	

Concerning the common signs and symptoms reported by respondents, majority of the respondents reported on pain during urination with a percentage score of 56.4%. These were seconded by those that reported on genital discharge, accounting for 19.7% as shown in **Figure 4**.

For transmission, a majority of 81.2% reported that STI are transmitted through unprotected sexual intercourse with an infected person. Interestingly, 10.3% reported that it's transmitted from mother to child while 7.7% reported that its transmitted through the sharing of sharp objects with infected persons

Up to 96.6% of respondents reported that STI can be prevented, with majority of them reporting on the use of condoms as the most preventable method that can be used (53.8%). 1.7% reported on vaccination as the best preventable way against STI as shown in **Figure 5**.

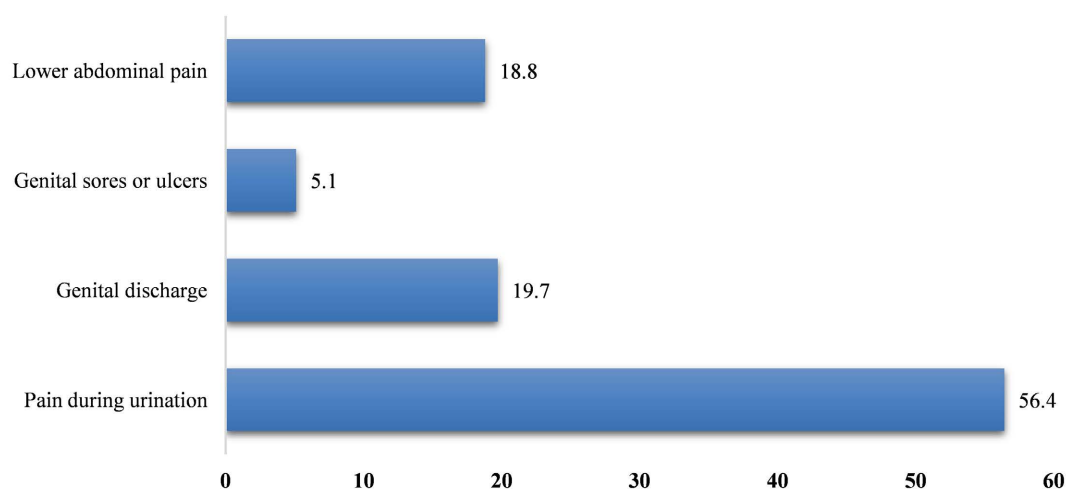


Figure 4. Pie chart showing the common symptoms of STI as reported by respondents.

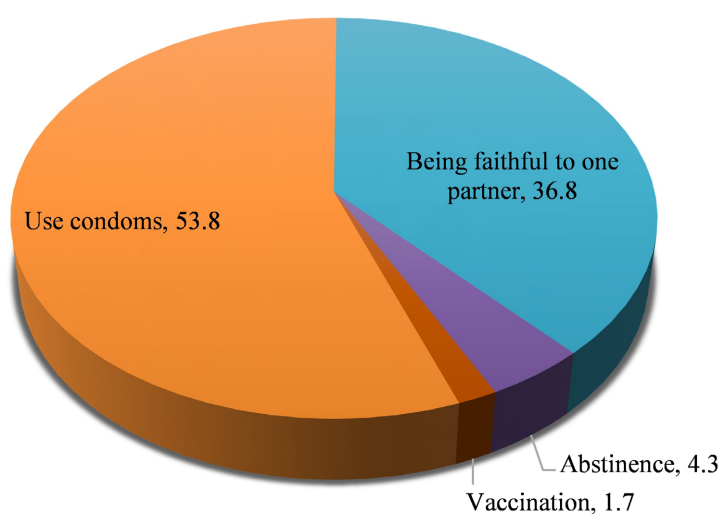


Figure 5. Pie chart showing methods on how STI can be prevented.

3.6. Association between Methods of STI Prevention and Socio Demographic Characteristics of Respondents

Table 4 shows that unprotected sex was the most commonly reported mode of STI transmission across all subgroups, with significant differences observed by sex and occupation. Females (50.0%) were more likely than males (31.9%) to report unprotected sex as a transmission route, and this difference was statistically significant ($\chi^2 = 10.00$, $p = 0.05$). Sharing of sharp objects and mother-to-child transmission were less frequently reported overall. Marital status also influenced responses, with married individuals more frequently identifying unprotected sex (48.3%) and mother-to-child transmission (6.9%) compared to singles and other categories, though this association was not statistically significant ($p = 0.21$). Participants with secondary education most commonly identified all three routes of transmission, particularly unprotected sex (60.3%), though no statistically signif-

icant association was found between education level and mode of STI transmission ($\chi^2 = 9.43$, $p = 0.15$). Occupational differences were significant ($p = 0.05$), with farmers (33.6%) and housewives (14.7%) more likely to cite unprotected sex, while teaching and journalism were linked to fewer reported routes. Religious affiliation and place of residence showed no statistically significant association with STI transmission modes, suggesting relatively uniform knowledge across these groups.

Table 4. Association between methods of STI transmission and socio demographic characteristics of respondents.

Variable	Characteristic	How are STI transmitted?			Chi square (<i>p</i> . value)
		Unprotected sex n (%)	Sharing sharp objects n (%)	From mother to child n (%)	
Sex	Male	37 (31.9)	03 (2.60)	09 (7.80)	10.00
	Female	58 (50.0)	06 (5.20)	03 (2.60)	(0.05)*
Marital status	Single	34 (29.3)	05 (4.30)	03 (2.60)	
	Married	56 (48.3)	03 (2.60)	08 (6.90)	08.37
	Divorced	04 (3.40)	00 (0.00)	00 (0.00)	(0.21)
	Widowed	01 (0.90)	01 (0.90)	01 (0.90)	
Level of education	Primary	12 (10.3)	03 (2.60)	01 (0.90)	
	Secondary	70 (60.3)	05 (4.30)	07 (6.00)	09.43
	Tertiary	09 (7.80)	01 (0.90)	04 (3.40)	(0.15)
	None	04 (3.40)	00 (0.00)	00 (0.00)	
Occupation	Students	21 (18.1)	05 (4.30)	02 (1.70)	
	Farming	39 (33.6)	02 (1.70)	05 (4.30)	
	Teaching	10 (8.60)	00 (0.00)	03 (2.60)	
	Nurse	02 (1.70)	00 (0.00)	00 (0.00)	12.08
	Journalist	02 (1.70)	00 (0.00)	01 (0.90)	(0.05)*
	Veterinary	00 (0.00)	00 (0.00)	01 (0.90)	
	Housewife	17 (14.7)	02 (1.70)	00 (0.00)	
	Tailor	04 (3.40)	00 (0.00)	00 (0.00)	
Religion	Christian	60 (51.7)	07 (6.00)	09 (7.80)	1.41
	Muslim	34 (29.3)	02 (1.70)	03 (2.60)	(0.84)
	Others	01 (0.90)	00 (0.00)	00 (0.00)	
Place of residence	Urban	51 (44.0)	05 (4.30)	07 (6.00)	0.09
	Rural	44 (37.9)	04 (3.40)	05 (4.30)	(0.95)

*-Statistically significant at 0.05 significance level.

3.7. Sexual History as Risk Factor of STI

In this study, up to 88.9% ($n = 104$) reported to have had sexual intercourse with 11.1% ($n = 13$) reported not to have had sex. Majority of respondents (28.2%, $n = 33$) reported to have had sex at the age of 19 years. The minimum age reported by respondents to have had sex was 14, with a percentage score of 0.9% ($n = 1$) with the maximum age being 24 with the same percentage score (0.9%, $n = 1$).

Up to 75.2% ($n = 88$) reported to have one sexual partner while 12.8% reported to have 2 sexual partners. In this study, only 7.7% of respondents reported to always use condoms during sexual intercourse. 31.0% reported never using condoms during sexual intercourse as shown in **Figure 6** below.

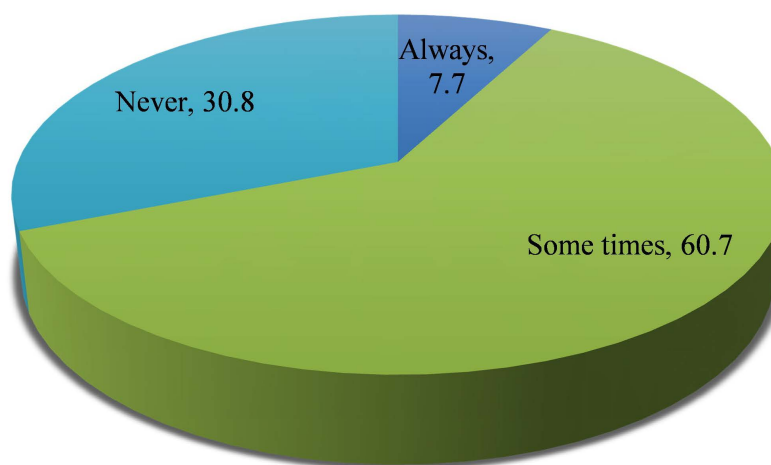


Figure 6. Pie chart showing responses of respondents on if they use condoms during sexual intercourse.

3.8. Association between Number of Sexual Partners and Prevalence of STI

Table 5 presents the association between the number of sexual partners in the past 12 months and the prevalence of sexually transmitted infections (STI) among 103 participants. Of the total, 85.4% reported having only one sexual partner, and within this group, 35.9% tested positive for STI, while 49.5% tested negative. Conversely, 14.6% of participants had two sexual partners, with a higher proportion (8.7%) testing positive and a smaller proportion (5.8%) testing negative. Although the prevalence of STI appears slightly higher among those with multiple partners, the association between number of sexual partners and STI status was not statistically significant ($\chi^2 = 1.67$, $p = 0.15$). This suggests that while having multiple sexual partners may be associated with increased STI risk, the relationship was not strong enough in this sample to reach statistical significance.

In this study, 10.3% ($n = 12$) reported to have had casual sex and 6.0% ($n = 7$) reported to have exchanged sex for money. There was no statistically significant association between the above 2 variables and the presence of STI in the study population ($p > 0.05$).

Table 5. Association between number of sexual partners and prevalence of STI.

			Prevalence of STI		Total	χ^2 (<i>p</i> value)
			Positive	Negative		
How many sexual partners have you had in the 12 months	One	Count	37	51	88	
		% of Total	35.9%	49.5%	85.4%	
	Two	Count	9	6	15	1.67
		% of Total	8.7%	5.8%	14.6%	(0.15)
Total		Count	46	57	103	
		% of Total	44.7%	55.3%	100.0%	

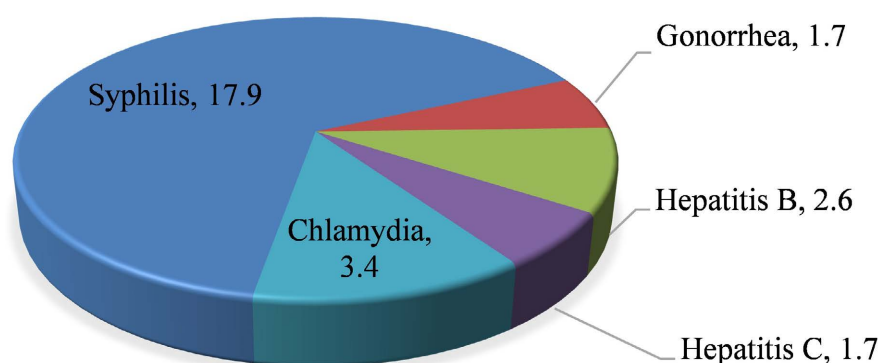
3.9. History of STI as a Risk Factor

Table 6 below presents responses of the study respondents on if they have ever been diagnosed with any STI before. Up to 27.4% agreed that they had been diagnosed with an STI before.

Table 6. Have you been diagnosed with an STI.

	Frequency	Percent	Valid percent	Cumulative percent
Yes	32	27.4	27.4	27.4
No	85	72.6	72.6	100.0
Total	117	100.0	100.0	

Majority of the infection's respondents had had was reported to be syphilis with 17.9% as shown in **Figure 7** below.

**Figure 7.** Pie chart showing STI respondents had had before.

3.10. Association between If Respondents Have Ever Been Diagnosed with STI before and Prevalence of STI

Figure 8 indicates a statistically significant association between a prior STI diagnosis and current STI prevalence ($p = 0.02$). Among those who reported having been previously diagnosed with an STI, 32 individuals (66.7%) tested positive again, while only 16 (33.3%) tested negative. In contrast, among those with no

prior diagnosis, a smaller proportion 16 (23.2%) tested positive, whereas the majority 53 (76.8%) tested negative. This significant difference suggests that individuals with a history of STI diagnosis are more likely to have recurrent or persistent infections compared to those without such a history.

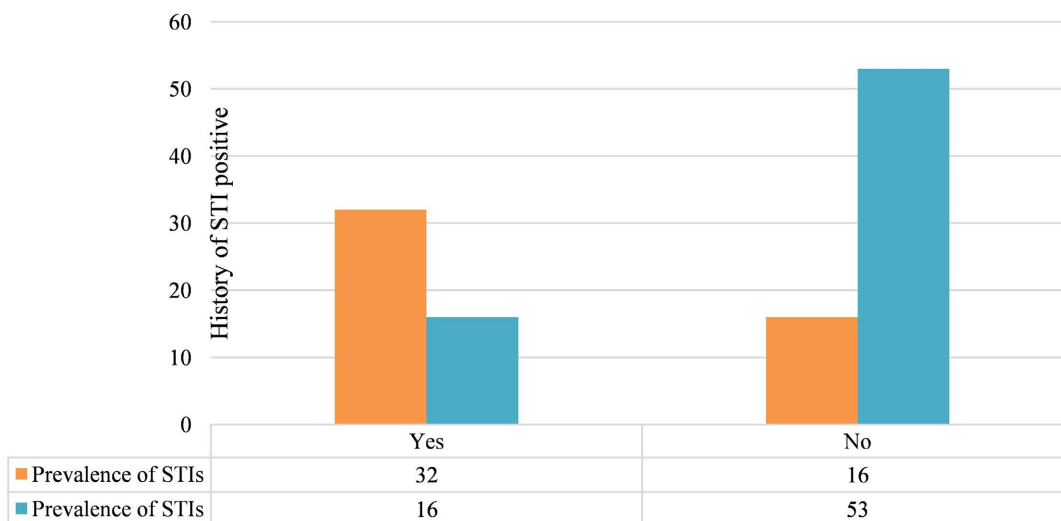


Figure 8. Association between if respondents have ever been diagnosed with STI before and prevalence of STI.

From those that reported to had been infected before, only 23.1% reported to had received treatment from the STI they had and only 13.7% had informed their sexual partner that they were diagnosed with an STI.

For those that received treatment, 78.6% received treatment in a hospital with 10.7% each, reporting to had received treatment in a pharmacy or had taken self-medication.

4. Discussion

The socio demographic characteristics of the 117 study participants reflect a population largely composed of young, married, and educated individuals, with a mean age of 27.6 years. This finding aligns with similar demographic distributions seen in STI related studies conducted across sub-Saharan Africa, which often report a concentration of cases among young adults aged 20 - 30 years [19] [20]. The dominance of females (57.3%) mirrors observations in similar studies where females tend to be more represented in health-related research, possibly due to higher healthcare seeking behavior [21].

The overall STI prevalence of 41% among the 113 laboratory tested participants is significantly high and consistent with results from similar populations in Cameroon and beyond. For instance, a study in the South West Region of Cameroon reported an STI prevalence of 43% among sexually active women [22], while another study in Nigeria recorded a rate of 37.8% among youths aged 15 - 29 years [23]. The high prevalence observed in our study underscores the persistent public

health burden of STI, particularly in developing countries with limited access to effective sexual health education and services [1] [4] [24].

Regarding the types of STI identified, syphilis (17.1%) and chlamydia (12%) were the most prevalent, in line with data from the WHO, which highlights syphilis and chlamydia as leading curable STI globally [2] [3] [25]. Similar studies in Ethiopia and Ghana also ranked syphilis and chlamydia as the top STI in their study populations [26] [27]. Interestingly, gonorrhoea (4.3%), hepatitis B (4.3%), hepatitis C (3.4%), and HIV (1.7%) were less prevalent in our study. The relatively low HIV prevalence may be due to increased awareness, improved antiretroviral therapy availability, and ongoing public health campaigns, particularly targeting the youth [28].

The association between STI prevalence and sex was significant ($p = 0.03$), with females showing a higher positivity rate than males. This is supported by global evidence indicating that women are biologically more susceptible to STI due to larger mucosal surfaces exposed during intercourse and social barriers limiting access to care [29] [30]. Moreover, cultural gender dynamics often reduce women's negotiation power in sexual relationships, increasing their vulnerability [31].

Marital status also had a significant association with STI prevalence ($p = 0.01$), with married individuals surprisingly recording the highest infection rates (29.1%). This contradicts the general assumption that married individuals are at lower risk, but aligns with several studies that revealed infidelity and reduced condom use within marriages contribute to increased STI transmission [32] [33]. Similar patterns were observed in studies conducted in Uganda and Kenya, which found elevated STI rates among married women [34] [35].

Although educational level, occupation, religion, and residence did not show statistically significant associations with STI status, trends suggested that those with secondary education (25.6%) and those involved in farming (17.1%) were among the most affected. This aligns with findings in Northern Nigeria, where rural based youth with only basic education reported higher STI prevalence due to limited access to sexual health information [36]. The high rate among farmers may also relate to poor access to health infrastructure in rural communities, as corroborated by research from rural Malawi and Uganda [37] [38].

In terms of STI knowledge, 98.3% of respondents reported good awareness, particularly of HIV (53.8%) and syphilis (22.2%). This reflects a generally positive awareness level, consistent with findings in urban Cameroon and Ghana where most youths could correctly identify HIV and syphilis as STI [39] [40]. However, knowledge did not always translate to safe practices; only 7.7% reported always using condoms, while 31% reported never using them. This disconnect between knowledge and practice is a common theme across sub Saharan African STI research [7] [8] [41].

When assessing methods of STI prevention, unprotected sex was the most commonly identified transmission mode (81.2%). This was significantly associated with sex ($p = 0.05$), as more females than males acknowledged this route. This further illustrates how women may be more aware of STI risks but remain vulner-

able due to socio cultural constraints [42]. Similar findings have been reported in Senegal and Burkina Faso [43] [44].

Concerning sexual behavior, the majority reported having only one sexual partner (85.4%), yet STI prevalence remained relatively high within this group (35.9%). This indicates that even within monogamous relationships, the risk of STI transmission persists, possibly due to unfaithful partners or past exposures [45]. The association between the number of sexual partners and STI prevalence was not statistically significant ($p = 0.15$), aligning with studies in South Africa and Nigeria that emphasize condom use and partner treatment over mere partner count as more critical determinants of STI risk [46] [47].

A significant association ($p = 0.02$) was observed between prior STI diagnosis and current infection. Those previously diagnosed were more likely to be infected again, suggesting possible reinfections or incomplete treatment. Studies in Kenya and Tanzania similarly highlight recurrence due to inadequate partner notification and self-medication [48] [49]. In our study, only 23.1% sought treatment, and just 13.7% informed their partners, echoing findings from Uganda and Malawi where stigma and fear impede partner disclosure and proper treatment seeking behaviour [50] [51].

Despite the high level of STI awareness among respondents (98.3%), consistent condom use remained remarkably low, with only 7.7% reporting always using condoms and 31% reporting never using them. This disconnection between knowledge and protective behaviour reflects a well-documented phenomenon in sub-Saharan Africa, where awareness of STI risks does not necessarily translate into safe sexual practices [7] [8]. Several behavioural and socio-cultural factors may explain this gap. For instance, perceived invulnerability, optimism bias, and limited self-efficacy in negotiating condom use can reduce the likelihood of adopting protective behaviours even among knowledgeable individuals [52] [53]. Gender power dynamics further exacerbate the issue: women, despite higher awareness, may lack the agency to insist on condom use due to social norms that prioritize male sexual decision-making or stigmatize female assertiveness in sexual matters [31] [42]. Cultural and marital norms may also influence behaviour; in many communities, condom use within marriage is associated with distrust or infidelity, discouraging couples from practicing consistent protection [32] [33]. Economic factors, such as dependency on male partners for financial support, can similarly constrain the ability of young women to demand condom use [54]. Additionally, misconceptions regarding STI risk from seemingly “trusted” partners and limited access to affordable or discreet condoms may contribute to inconsistent use [55]. Together, these behavioural, socio-cultural, and structural barriers illustrate why knowledge alone is insufficient to prevent STI transmission and underscore the need for multifaceted interventions that combine education with empowerment, negotiation skills, and improved access to sexual health resources.

5. Conclusions

The study population consisted predominantly of young adults with a mean age

of 27.6 years, with a higher representation of females and married individuals. Most participants had attained at least secondary education and were primarily engaged in farming or studying, reflecting a fairly typical rural-urban Cameroonian youth demographic.

The prevalence of sexually transmitted infections (STI) in this population was notably high at 41%, with syphilis and chlamydia being the most common. This finding indicates a significant burden of STI among sexually active youths aged 15 - 45 years despite high levels of STI awareness.

Female sex, marital status (especially being married), and prior STI history were significantly associated with higher STI prevalence. Other factors such as inconsistent condom use, low partner notification rates, and engagement in unprotected sex further contributed to elevated STI risk in this group.

6. Study Limitations

The use of convenience sampling may have introduced selection bias, as participants who attended the clinic during the study period may not be representative of all sexually active youths in the community. This could lead to overestimation or underestimation of STI prevalence. Therefore, the reported prevalence should be interpreted with caution and may not be fully generalized to the broader population.

Conflicts of Interest

The authors declare no conflicts of interest.

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